

REMARKS

The present paper is in response to the Office Action mailed December 18, 2002. Claims 1-12 are pending. The Examiner objected to portions of the specification concerning use of trademarks, and the Examiner rejected the claims under 35 U.S.C. §§ 103 and 112. In particular, the Examiner rejected Claims 2, 4, 9, and 11 under Section 112 for use of the phrases "and combinations thereof" and "and alloys thereof." In addition, the Examiner rejected Claims 1-4 and 6-11 under Section 103 as being unpatentable over U.S. Patent No. 3,945,695 to Speakman in view of U.S. Patent No. 4,985,161 to Tohzuka et al. Further, Claims 5 and 12 were rejected under Section 103 as being unpatentable over Speakman in view of Tohzuka and further in view of U.S. Patent No. 6,086,257 to Lee.

As an initial matter, Applicants have amended portions of the specification that include reference to trademarked goods as pointed out by the Examiner. In addition, Claims 2, 4, 9, and 11 have also been amended to remove the rejected language cited by the Examiner. In light of the foregoing amendments, it is respectfully submitted that the specification objections and the rejections under Section 112 are overcome.

Regarding the rejections under Section 103, Applicants disagree with the Examiner's position. More specifically, the Examiner stated that Speakman teaches a bearing assembly comprising a pair of members movable relative to one another, yet does not teach a coating of PTFE-based material. Applicants agree with this assessment, as these teachings are those of conventional bearings. Speakman, however, does not *suggest* a PTFE-based material either, as he is concerned with reducing high stress areas of the bearing by rounding sharp edges and moving a circumferential grease channel from the outer surface of a shaft to the inner surface thereof. One of ordinary skill in the art would not look for another type of lubricant material to use in conjunction with the grease taught by Speakman in order to improve the bearing operation, but instead would seek to smooth edges and remove structural features that create stress concentrations.

Despite Speakman's lack of teaching or suggestion of a PTFE-based material, the Examiner attempted to combine Speakman with Tohzuka, which discloses a PTFE-based

material in a grease medium. The Examiner stated that it would have been obvious to use the lubricant of Tohzuka in the Speakman bearing to improve the sliding surface between the two bearing components. In addition, the Examiner took that position that the first member is “readable as having a PTFE-based material and the grease material as is the second component although it is a mixed material.” Applicants strongly disagree with the Examiner’s proposed combination.

Tohzuka is concerned with creating a fluorine-containing grease that has improved homogeneity and storage capacity. The solution is a grease comprising a fluorine-containing oil and PTFE that is formed by using a fluorine-containing solvent and perfluoroalkyl polyether. While Applicants do not dispute the teachings of Tohzuka, the Examiner has made no showing of an actual teaching or suggestion to combine the references.

It has long been known that for a proper obviousness rejection there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by an applicant. *In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988 (“teachings of references can be combined only if there is some suggestion or incentive to do so.”)) (emphasis in original) (quoting *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984)). In addition, there must be specificity in the suggestion or teaching to combine the references. *See, e.g., In re Kotzab*, 217 F.3d 1365, 1371, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000) (“particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.”); *In re Rouffet*, 149 F.3d 1350, 1359 (Fed. Cir. 1998) (“[E]ven when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious.”).

The Examiner’s statement that “it would have been obvious to have used the lubricant of Tohzuka in the assembly of Speakman so as to provide improved and improved [sic] sliding surface between the two components” does not adequately address the issue of motivation to

combine the references. It is improper, in determining whether a person of ordinary skill in the art would have been led to a particular combination of references, simply to "[use] that which the inventor taught against its teacher." *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 U.S.P.Q. 303, 312-13 (Fed. Cir. 1983).

One of ordinary skill in the art would not look to Speakman for the teaching of a PTFE-containing material to be used in conjunction with a grease. It is clear that the Examiner searched for a bearing assembly and then for a PTFE-containing material in hopes of combining them and rejecting the claims of the present application. Applicants do not dispute that, at least individually, bearing assemblies and PTFE-containing materials exist; indeed, the PTFE-containing material cited in the present application refers to commercially available products. However, without a proper teaching or suggestion to combine the references cited by the Examiner, the rejection cannot stand. That is the case here, as each reference seeks to address a problem entirely different than the other. The fact that one reference cites a bearing assembly and the other reference cites a PTFE-containing grease does not finish the equation.

Even if, hypothetically, the references were combined, the combination would still not result in the assembly of the presently claimed invention. As one of ordinary skill in the art would know, the PTFE-based material cited in the present claims is not a grease, such as the grease disclosed by Tohzuka. Instead, the PTFE-based coating is a distinct, polyester, thermosetting, resin-based material that is applied one of a number of ways, including spraying, brushing on, or dipping into a bath of the material. Neither Speakman nor Tohzuka teach or suggest a distinct coating applied to one surface of a bearing component that acts in conjunction with a grease. Because the proposed combination of references is not properly combinable, Applicants respectfully submit that the rejections of Claims 1 and 7, as well as the claims that depend therefrom, be withdrawn.

Applicants also wish to specifically respond to the rejections of Claims 3 and 10, which teach a coating thickness of about 0.003-0.007 inch. The Examiner rejected these claims as a "matter of design choice and can be varied depending upon the desired sliding characteristics of the designer." Applicants strongly disagree. In particular, the background portion of the present

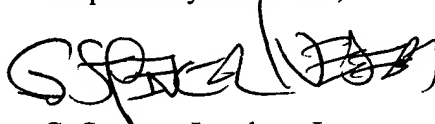
application describes conventional practice of using coatings, whereby thicker coating are thought to be more advantageous.

The presently claimed invention flies in the face of conventional coating practice, however, by teaching a thin PTFE-based coating used in conjunction with a grease. Applicants have discovered that the thin coating of PTFE-based material used with a grease provides advantageous results in a variety of applications, most notably in extreme loading conditions. The range set forth in Claims 3 and 10 is not a matter of design choice based on the proposed combination of Speakman and Tohzuka, as neither reference teaches or suggests the combination of a PTFE-based coating used in conjunction with a grease, let alone a specific range for the coating thickness. Accordingly, Claims 3 and 10 are patentably distinct over the prior art, particularly when claimed in combination with a grease lubricant. As such, Applicants strongly reiterate the patentability of these claims in addition to the patentability of the claims from which they depend.

Applicants respectfully submit that the rejections under 35 U.S.C. § 112, second paragraph, have been overcome, and the rejections under 35 U.S.C. §103(a) should be withdrawn and a Notice of Allowance be issued. Should there be any questions or comments regarding this paper or with the present application, the Examiner is encouraged to telephone the undersigned as soon as possible.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "G. Spencer Lueders, Jr.", with a stylized flourish at the end.

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